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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/736,059 | 03/09/2004 | Brent Alan Elliott | CET-025985 | 4275 |

7590 10/28/2005
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St. Louis, MO 63102

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| EXAMINER |
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MAI, ANH T

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| ART UNIT | PAPER NUMBER |
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2832

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/736,059 | Applicant(s) ELLIOTT ET AL. | |
| | Examiner Anh T. Mai | Art Unit 2832 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gold [6154109].

Gold discloses a first monolithic core structure 300 comprising a plurality of magnetic layers 312,316; at least one nonmagnetic layer [air gap] 308 separating one of said plurality of magnetic layers from another of said plurality of magnetic layers; a first opening 310 extending through said first core structure; a rectangular conductor 304 establishing a conductive path through said first opening, wherein said at least one nonmagnetic layer separates said conductive element from one of the magnetic layers [figure 3; col 7, lines 5-15].

With respect to claim 4, nonmagnetic layer 308 defining one side of said first opening as shown in figure 3.

With respect to claim 5, non-magnetic layer comprises a pair of non-magnetic layers 310 defining opposite sides of opening.

With respect to claim 6, the nonmagnetic layer 308 is parallel to the magnetic layers.

With respect to claim 7, conductive element having four sides of rectangular and the opening comprises an inner surface defined by magnetic layers, and at least one non-magnetic layer of sides of the conductive element extending upon the nonmagnetic layer and the remaining sides of the conductive element being spaced from inner surface [figure 3].

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With respect to claim 8, second core structure monolithically formed with first structure having magnetic layers 314, 318 and non magnetic layer 308 separating the magnetic layers from another of the plurality of magnetic layers, second opening is extending through from the first opening [figure 3].

With respect to claim 9, insulating layer monolithically formed vertically to separate the first and second core [figure 3].

With respect to claims 10-11, insulating layers 310 substantially parallel/perpendicular to the magnetic layers at the opening [figure 3].

With respect to claims 12-13, conductive element is in contact and supported by insulator 310 and at center of the opening.

With respect to claim 15, Gold discloses a first core structure and a second core structure separated by an insulating layer 308, each of said first and second core structures comprising a plurality of magnetic layers, 312/316 and 314/318 at least one nonmagnetic layer separating 308 the magnetic layers from another of said plurality of magnetic layers, and an opening extending therethrough for passage of a conductive element [figure 3].

With respect to claim 16, insulating layer extends substantially parallel to magnetic layers of at least one of said first and second core structures.

With respect to claim 17, insulating layer 308 extends substantially perpendicular to said magnetic layers of at least one of said first and second core structures [figure 3].

With respect to claim 18, openings of said first and second core structure are substantially rectangular, said at least one nonmagnetic layer of each of said first and second core structures defining one side of said opening for each respective first and second core structure.

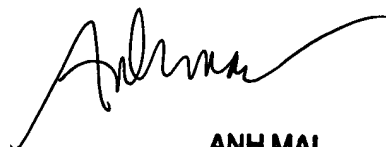
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With respect to claims 19-20, the openings of said first and second core structures are substantially rectangular and said at least one nonmagnetic layer of each of said first and second core structures comprises a pair of nonmagnetic layers, said pair of nonmagnetic layers defining opposite sides of said opening for each respective first core structure and said second core structure; and conductive element establishing a conductive path through each of said openings of the first and second core structures, wherein at least one nonmagnetic layer of said first and second core structures separates said conductive element from one of the magnetic layers [figure 3].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANH MAI
PRIMARY EXAMINER**